

Launch event of the OECD's "*Framework for industry's net-zero transition: Developing financing solutions in emerging and developing economies*"

Clean Energy Finance and Investment Mobilisation (CEFIM) programme

8 September 2022, 10:00-11:15 Central European Time (virtual)

Introduction

Mr Alain de Serres

Acting Director, OECD Environment Directorate

The manufacturing industry sector is essential to sustain economic activity and for sustainable development, yet production of materials and goods is a major source of CO₂ emissions accounting for 40% of the total global (including direct and indirect emissions). One critical issue that gained momentum recently is industry's key role to achieve net-zero emissions by 2050. Therefore, the G7, G20 and many other international, regional, and national policy fora have started to embed industry decarbonisation strategies in their agendas.

The industry provides thousands of products for the economy and society via a wide range of processes and international supply chains, thus there is no one-size-fits-all solution to mitigate its emissions. The governance of the industry is equally challenging, as the sector is intertwined with several areas, from economy and trade to environment and employment.

Yet, the main challenge to industry decarbonisation stems from the high costs and limited commercial readiness of many low-carbon technologies. This creates risks for private sector actors to invest in the capacity required to achieve the decarbonisation targets and reach a net-zero economy. This is a particularly salient problem for emerging and developing economies, where the lion's share of the industrial production's increase will likely take place in the coming decades.

This is the context in which, at the OECD we have developed the "*Framework for industry's net-zero transition*" to develop financing solutions in emerging and developing economies.

Framework presentation

Mr Deger Saygin

Industry Programme Lead, CEFIM

The CEFIM programme has extended its scope of work to cover industry decarbonisation since the end of 2021, complementing its core clean energy activities on renewable power and energy efficiency.

International organisations and policy makers now recognise the importance of investing in industry decarbonisation to achieve net-zero emissions by this mid-century. As industrial output will grow mainly in emerging and emerging economies over 2020-2050, there is a high risk to fall short on this target unless low-carbon technologies are implemented.

Although the key technologies for industry decarbonisation, such as green hydrogen or carbon capture, use and storage (CCUS), are well identified, many of them are either at demonstration phase or early stage of commercialisation. Moreover, upfront investment and operating costs of low-carbon technologies are often higher than for incumbent technologies. As the industry sector is mainly driven by private actors for which maintaining profits is critical, building solutions to create viable business cases in these technologies is essential.

Flexibility is at the core of the new OECD *Framework*, which acknowledges the complexity of considerations influencing investments decisions for the industry decarbonisation at national level, such as the international competition, the existence of carbon markets, the quality of infrastructures, or the asset stranding risk, to develop solutions improving the enabling market conditions and the financing of projects.

The *Framework* builds on three *pillars* that encompass five *Steps*. The *first pillar* aims to select one Focus Area at country level, which can be a specific industry sub-sector (e.g., cement) or a cross-cutting technology (e.g., efficient motors) applicable to multiple industry sub-sectors and actors. This will be facilitated through *Step 1: Stakeholder Engagement* where key policymakers, industrial actors and financing institutions will convene, and agree in view of the country's priorities, and *Step 2: Background research* consisting of deeper stakeholder consultations and desk-based research.

The *second pillar* is to provide tangible outcomes, *i.e.* a pipeline of bankable projects and accompanying financing solutions and recommendations to improve the market conditions so industry can invest in them. The CEFIM team and key stakeholders will carry out *Step 3: Business Cases and Pipeline of Project* to quantify how the implementation of low-carbon technologies in the Focus Area may impact production costs and investment capabilities. This will help to identify the needed technologies consistent with a net-zero emission pathway and what their opportunities and barriers are for profitable business cases, also by considering their benefits and risks. Subsequently, *Step 4: Market and Financing Solutions* will provide potential solutions that could be implemented in the following years and that can overcome the barriers and gaps identified in *Step 3*.

The *third pillar* is to support the international dialogue and national policy making process by sharing the best practices and key learnings from the *Framework* implementation. *Step 5: Disseminate Framework outcomes* will contribute to national events, and regional peer-learning and international fora to foster the benefits of the *Framework* implementation in various countries and industry subsectors. The outcomes of this dialogue process are expected to contribute to the national energy, climate and finance policies. The total time required to implement the *Framework* is expected to be at least 12 months.

The CEFIM team will co-ordinate the implementation in a first cycle of implementation, starting with Indonesia and Thailand from the last quarter of 2022 and onwards. The CEFIM team is looking forward to engaging with other countries who have expressed interest to implement the *Framework*.

High-level panel discussion: The role of financing for industry's net-zero transition

Moderation: Ms Kumi Kitamori, Deputy Director, OECD Environment Directorate

Ms Andriati Cahyaningsih

Policy Analyst at the Centre for Green Industry, Ministry of Industry, Republic of Indonesia

Mr Malte Bornkamm

Acting Deputy Director for Industry Decarbonisation / Head of Division for Market Framework and International Cooperation for the Decarbonisation of the Industry, Federal Ministry for Economic Affairs and Climate Action, Germany (BMWK)

Mr Thomas Guillot

Chief Executive, Global Cement and Concrete Association

Mr Ajeya Bandyopadhyay

Senior Operations Officer, IFC Asia

The macro-economic environment is putting a lot of pressure on profitability and economics of decarbonisation projects. While the pressure from the civil society to "go green" increases and sustainability-linked financing instruments are emerging, the industry and investors can face multiple challenges, such as the bankability of projects, the access to finance, or the lack of an enabling policy environment.

Some low-hanging fruits can improve the businesses profitability while reducing CO₂ emissions simultaneously, such as energy efficiency, material efficiency and recycling. For these applications, the *Framework* can identify the challenges to scale-up and replicate, for instance pointing out to the challenges for Small and Medium Enterprises (SMEs) who lack access to finance and capability to invest, although many of them are energy intensive. This is also an area where developing energy service companies (ESCOs) contributes to guarantee energy conservation benefits. Building profitable business cases for deep decarbonisation may prove more challenging. The large investment tickets can lead companies to seek off-balance sheet mechanisms. Concessional finance will be needed for technologies that are not commercially mature, but financing solutions like blended

finance must ensure that concessional finance is catalytic. While demand from concessional finance from the industry is increasing, it is a generic term covering multiple options and needs to be defined in the context of a country and a subsector. Therefore, solutions will vary according to the Focus Area, and it is positive that the *Framework* embraces flexibility as a key principle.

International finance institutions will play a critical role to help achieve the financing needs, especially for industry. International support can support emerging and developing economies through technical assistance and trainings. Indeed, the challenge of human resources should be considered, as skillsets must be developed along the transition to new technologies. The net-zero transition needs to be a just transition, leaving no one behind.

Many installations need to be replaced in industrialised countries that have slower growth in output to meet the 1.5°C target. This is especially true for hard-to-abate sectors, such as steel and cement. Germany has made industry decarbonisation a key point of its G7 Presidency in 2022. Aligning multiple stakeholders, including the industry actors, will be central to successfully establish a Climate Club to support the effective implementation of the Paris Agreement goals.

To flourish new green products, the first step would be to build consensus on definitions, for instance what “low-carbon” or “green” steel and cement may mean. This will need to be accompanied by establishing international recognised standards. The tracking and verification of green projects is a critical requirement from banks and financial institutions. Tax free or adjusted taxation for green products can help. Yet, for the market to take up, it is important to have a demand pull. For some materials, the public sector can develop green public procurement, typically in the cement sector, where up to 60% of the demand is associated with public infrastructure. For products where public demand is not significant, quotas and mandates can be useful. While bulk material production costs can increase greatly with low-carbon technologies, the impact on final product costs for consumers sometimes remain limited. Thus, a systemic approach of the value chain can pinpoint sweet spots where the support is the most impactful.

Industry is linked to international competition and the risk of carbon leakage must be addressed. In particular, the decarbonisation is a transition issue: there is a need for more demonstration projects, and policymakers must ensure that first-movers are not negatively impacted by the higher investments and costs of low-carbon technologies. Once an industry subsector will be successfully decarbonised, the distortion should fade away. In the meantime, policy frameworks setting targets and green taxonomies including thresholds will be necessary. We need to ensure that low-carbon economy emerges from the market, where tools such as carbon pricing with carbon border mechanism and carbon contract for difference can ensure a level playing field.

In translating global commitments to local action, global roadmaps provide helpful foundations to identify technologies and share knowledge. They need to be tailored to answer the specific needs of each country and each subsector to get projects off the ground. The new OECD *Framework* could be of great support to bring together and engage local industry associations, policymakers, financial institutions, international organisations, and industry experts. This will contribute to better understand the specifics of the country regulations and propose ad-hoc measures to build an investable environment for low-carbon projects.

The *Framework* has many synergies with and can build on the work undertaken by international organisations and sector associations, such as the [Country Climate and Development Reports](#) developed by the World Bank, or the [GCCA 2050 Net Zero Roadmap Accelerator Program](#). The implementation of the *Framework* in emerging and developing economies will be instrumental in identifying policies and financing solutions to make decarbonisation projects investable, and the central role of the OECD in the international dialogue will help disseminating the best practices and success factors to enhance the impact of the *Framework*.

Wrap-up

Ms Kumi Kitamori

Deputy Director, OECD Environment Directorate

- Decarbonisation is urgently needed, but solutions will be needed to reduce adverse impacts on competitiveness which is a salient risk for first movers.
- Decarbonisation priorities, opportunities and barriers need to be understood at both national and sectoral level.
- Technology open approach needed given the ambition level of the decarbonisation effort, supported with demonstration projects and projects that can lead to bankable projects, supported with knowledge transfer and technical assistance.
- Establishing standards, common definitions, policy frameworks will be needed to create the enabling conditions and markets for new products, including through approaches such as public procurement.
- New business models should be complemented with access to suitable and concessional credits and loans, innovative financing instruments, for all low-carbon technologies and for both large enterprises and SMEs.
- In parallel, de-risking and risk sharing mechanisms will need to be developed and implemented, especially for hard-to-abate industry and first movers.
- The full scope of net-zero transition must be addressed, including the needs for just transition.